



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Br
Search PubMed for Preview Go Clear
Limits Preview/Index History Clipboard Details

About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

LinkOut

Cubby

Related Resources

Order Documents

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

Search	Most Recent Queries	Time	Result
#25	Related Articles for PubMed (Select 8986756)	15:08:15	144
#17	Related Articles for PubMed (Select 8702542)	15:04:17	175
#19	Related Articles for PubMed (Select 8940054)	15:03:01	171
#8	Search #6 AND mutant	13:59:25	31
#6	Related Articles for PubMed (Select 9163520)	13:57:57	145
#4	Search nakane ohto	13:57:17	4
#3	Related Articles for PubMed (Select 9692900)	13:37:59	102
#1	Search "region II" "diphosphate synthase"	13:34:52	1

Clear History

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Aug 30 2004 06:52:01

IUBMB Enzyme Nomenclature

EC 2.5.1.29

Common name: farnesyltransferase

Reaction: *trans,trans*-farnesyl diphosphate + isopentenyl diphosphate = diphosphate + geranylgeranyl diphosphate

For reaction pathway [click here](#).

Other name(s): geranylgeranyl-diphosphate synthase; geranylgeranyl pyrophosphate synthetase; geranylgeranyl-PP synthetase; farnesyltransferase; geranylgeranyl pyrophosphate synthase

Systematic name: *trans,trans*-farnesyl-diphosphate:isopentenyl-diphosphate farnesyltransferase

Comments: Some forms of this enzyme will also use geranyl diphosphate and dimethylallyl diphosphate as donors; it will not use larger prenyl diphosphates as efficient donors.

Links to other databases: [BRENDA](#), [EXPASY](#), [KEGG](#), [ERGO](#), CAS registry number: 9032-58-0

References:

1. Sagami, H., Ishi, K. and Ogura, K. Occurrence and unusual properties of geranylgeranyl pyrophosphate synthetase of pig liver. *Biochem. Int.* 3 (1981) 669-675.

[EC 2.5.1.29 created 1984]

Return to [EC 2.5.1 home page](#)

Return to [EC 2.5 home page](#)

Return to [EC 2 home page](#)

Return to [Enzymes home page](#)

Return to [IUBMB Biochemical Nomenclature home page](#)

SRNT

	Type	Hits	Search Text	DBs
1	BRS	2	5935832.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT
2	BRS	2	9820138.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT
3	BRS	1	0674000.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT
4	BRS	7	674000.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT
5	BRS	2	537553.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT
6	BRS	23475	nakane.in. or ohto.in. or ohnuma.in. or hirooka.in. or nishino.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT
7	BRS	37	(nakane.in. or ohto.in. or ohnuma.in. or hirooka.in. or nishino.in.) and (diphosphate adj synthase)	USPAT; US-PGPUB; EPO; JPO; DERWENT
8	BRS	720	((geranylgeranyl or farnesyl) near2 (diphosphate adj synthetase or synthase))) or farnesyltransferase	USPAT; US-PGPUB; EPO; JPO; DERWENT
9	BRS	483	((((geranylgeranyl or farnesyl) near2 (diphosphate adj synthetase or synthase))) or farnesyltransferase) and (mutant or mutation or substitution or variant)	USPAT; US-PGPUB; EPO; JPO; DERWENT
10	BRS	42	(((((geranylgeranyl or farnesyl) near2 (diphosphate adj synthetase or synthase))) or farnesyltransferase) and (mutant or mutation or substitution or variant))) and (stearothermophilus or acidocaldarius)	USPAT; US-PGPUB; EPO; JPO; DERWENT
11	BRS	47	(((((geranylgeranyl or farnesyl or prenyl) near2 (diphosphate adj (synthetase or synthase)))) or farnesyltransferase) and (mutant or mutation or substitution or variant))) and (stearothermophilus or acidocaldarius)	USPAT; US-PGPUB; EPO; JPO; DERWENT